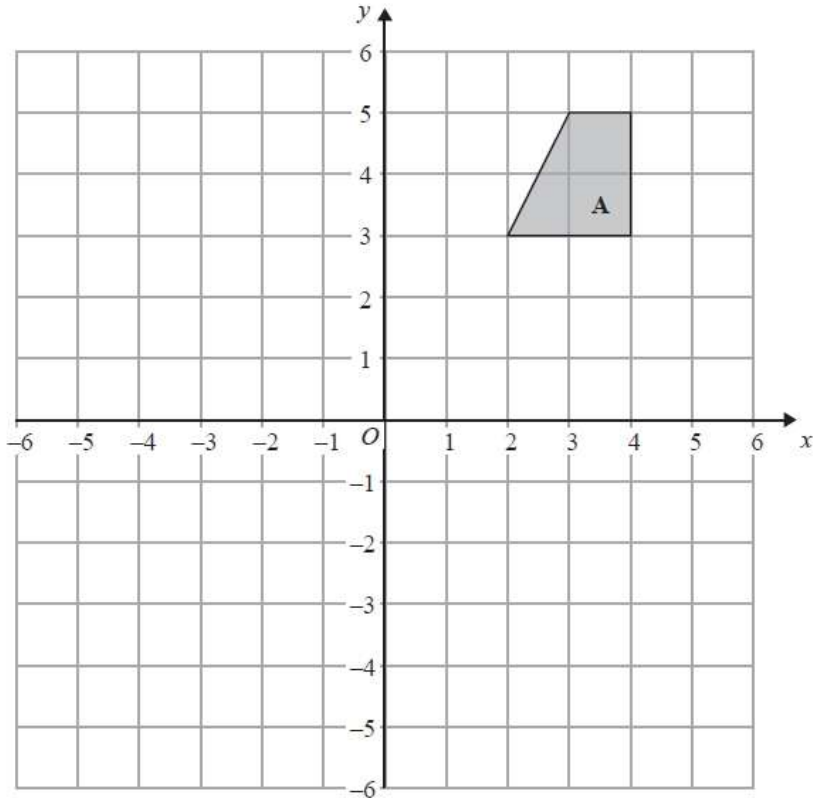


## GCSE QUESTIONS

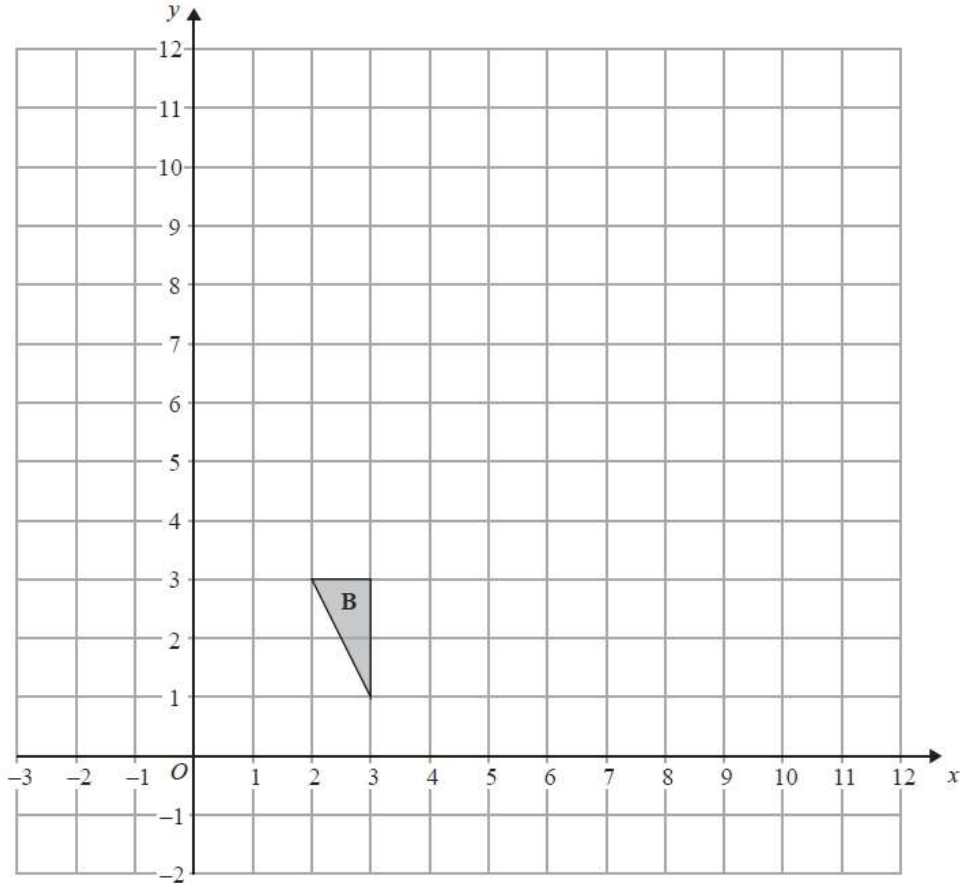
### Q1. NON-CALCULATOR



(a) On the grid, rotate shape **A**  $180^\circ$  about the point (1, 1).

(2)

(b) On the grid, enlarge triangle **B** by scale factor 3, centre (0, 0).

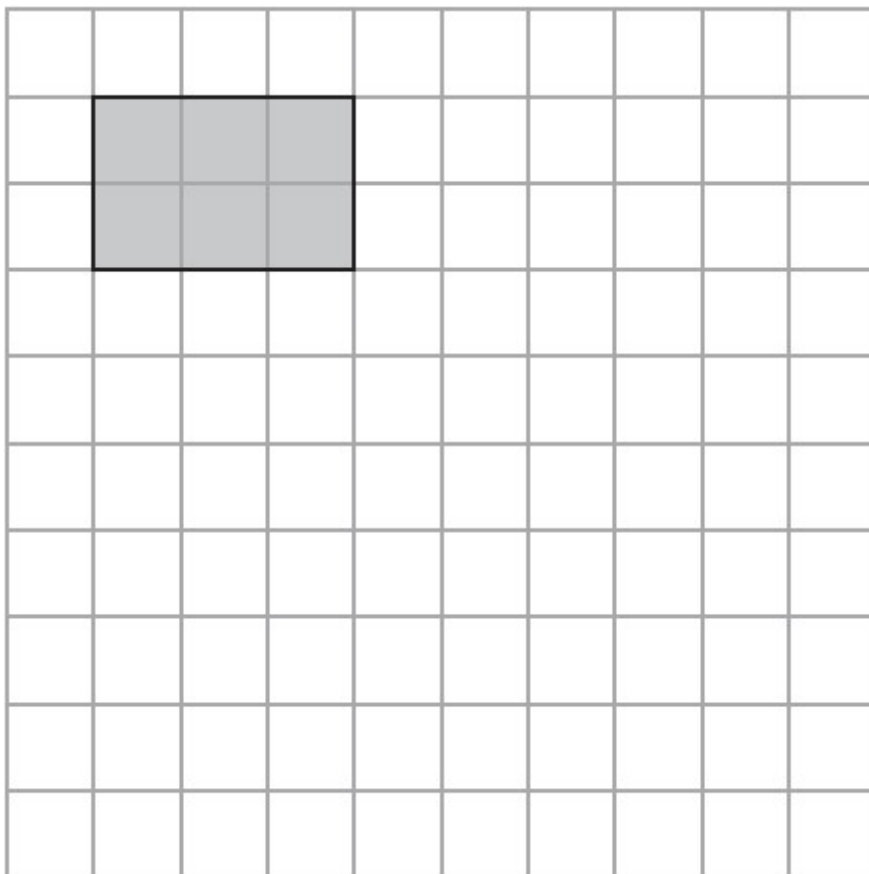


(2)

(Total for Question is 4 marks)

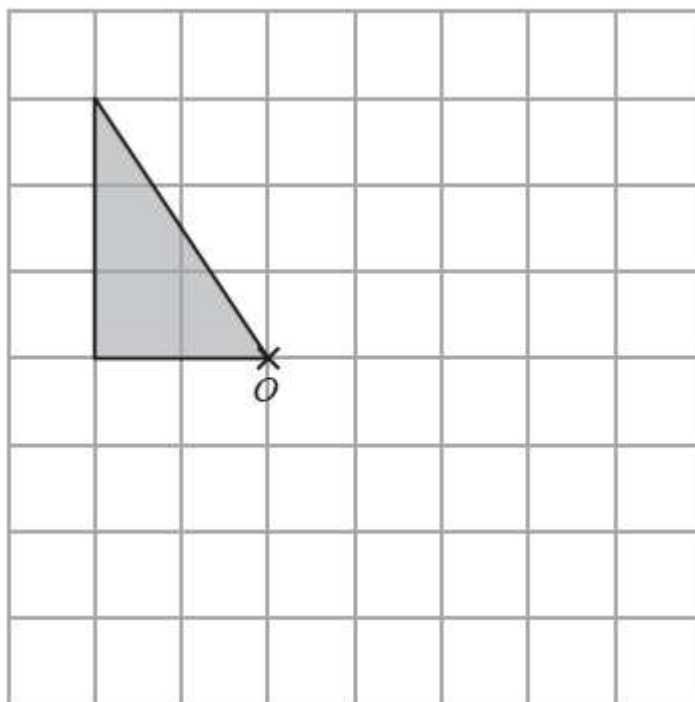
**Q2. NON-CALCULATOR**

(a) On the grid, draw an enlargement of the rectangle with scale factor 2



(1)

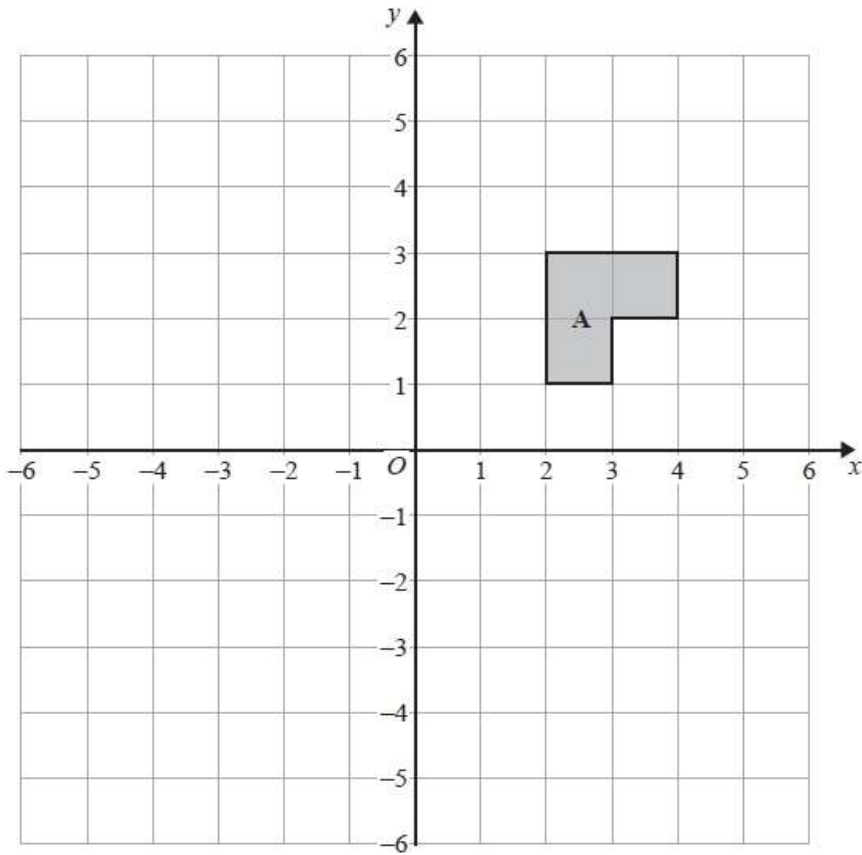
(b) On the grid, rotate the triangle 90° clockwise about the point O.



(2)

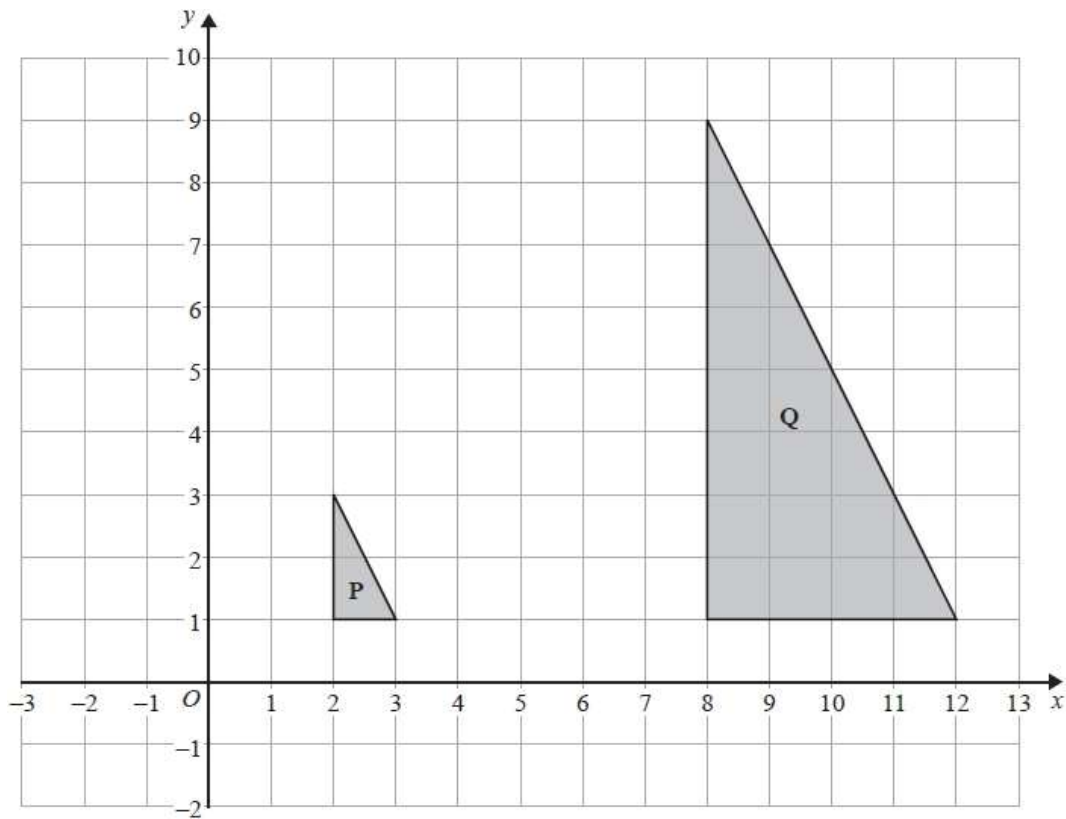
(Total for question = 3 marks)

**Q3. NON-CALCULATOR**



(a) Rotate shape **A**  $180^\circ$  about the point  $(0, 0)$ .

(2)



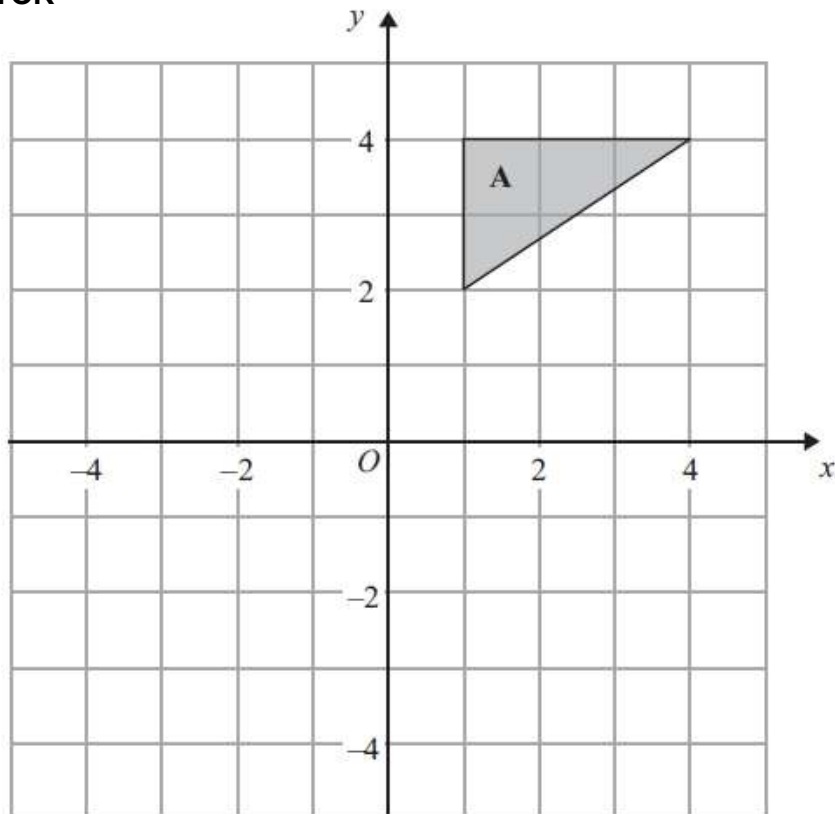
(b) Describe fully the single transformation which maps triangle **P** onto triangle **Q**.

.....  
 .....

(3)

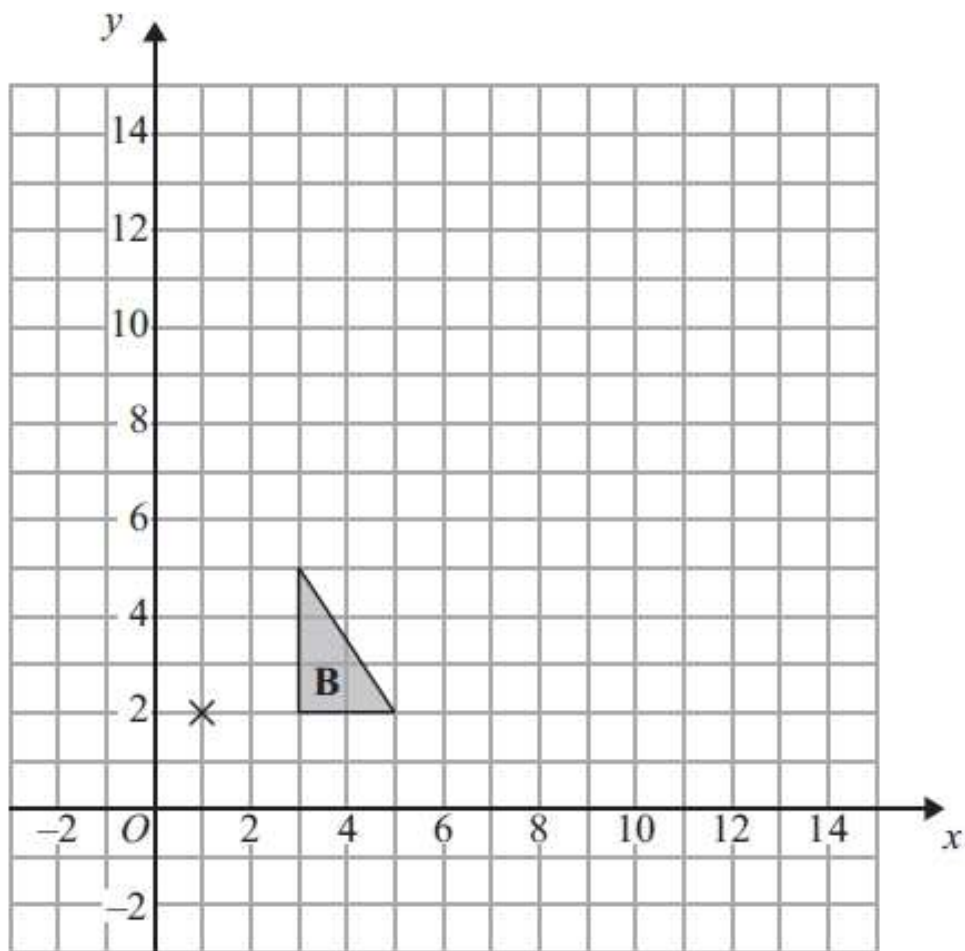
(Total for question = 5 marks)

**Q4. NON-CALCULATOR**



(a) Rotate triangle **A**  $90^\circ$  clockwise, centre **O**.

(2)

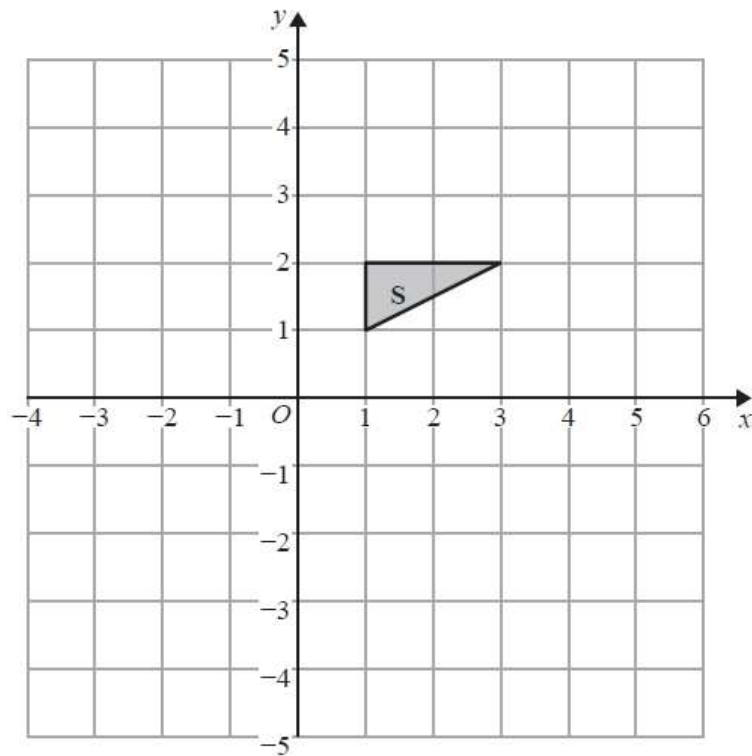


(b) Enlarge triangle **B** by scale factor 3, centre (1, 2).

(3)

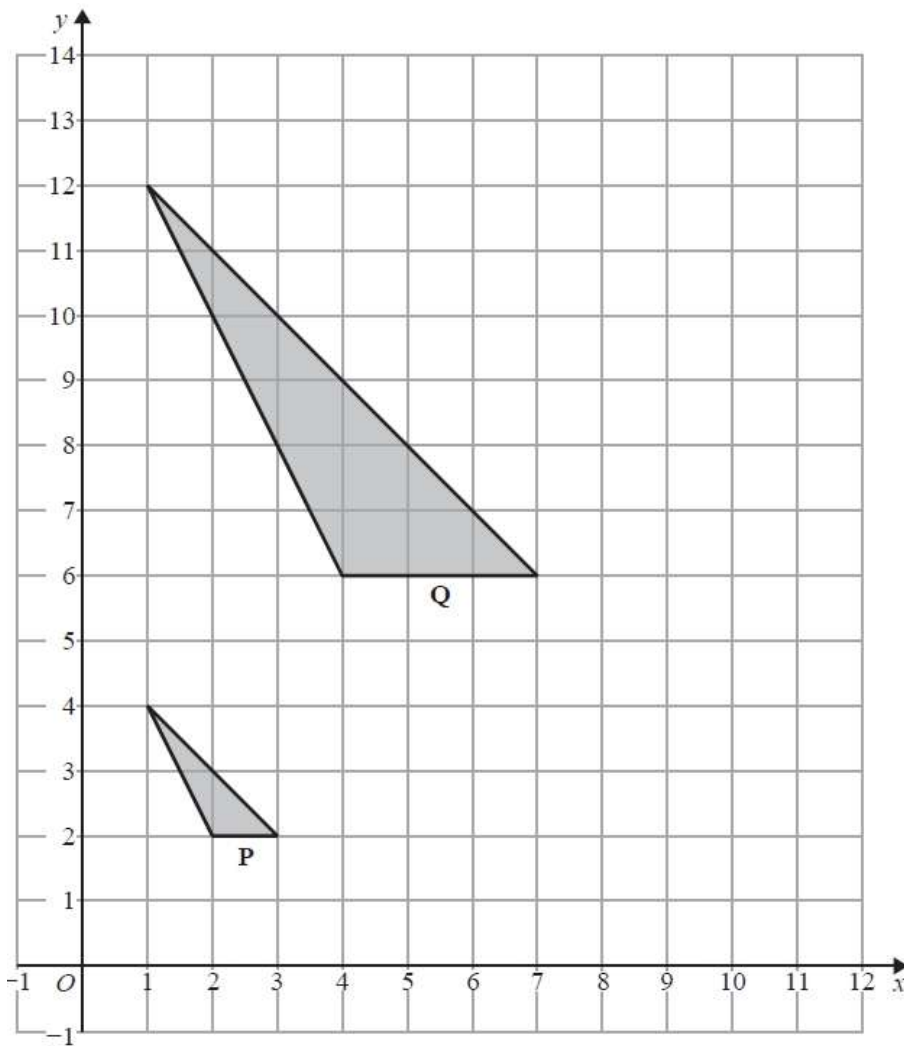
(Total for Question is 5 marks)

**Q5. NON-CALCULATOR**



(a) On the grid, rotate shape **S** by  $90^\circ$  anticlockwise about the origin.

(2)



(b) Describe fully the single transformation that maps shape **P** onto shape **Q**.

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(3)  
(Total for question = 5 marks)